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We claim:

1. Apparatus for supporting a rock formation comprising.

an elongated member having a base portion with a length substantially greater than a width defining longitudinal edges forming a channel therebetween.

said base portion having a bearing surface for contacting the rock formation and an opposite surface.

means for reinforcing said elongated member extending the length of said base portion and positioned centrally on said opposite surface within said chan-

at least one opening extending through said means for reinforcing said elongated member.

a bearing plate including a contact surface and an outer surface, said contact surface positioned in overlying abutting relation with said elongated member opposite surface.

a circular embossed area extending outwardly from said plate outer surface and defining a recessed portion having a bottom wall with a central opening therethrough,

said recessed portion bottom wall positioned in said opening in said elongated plate and positioned adjacent to said means for reinforcing said elongated member to restrain longitudinal movement of said plate on said elongated member,

said plate central opening aligned with said elongated member opening,

a longitudinal embossed area extending outwardly from said opposite sides of said circular embossed area of said bearing plate into overlying relation with said means for reinforcing said elongated member.

said longitudinal embossed area projecting from said plate outer surface in a configuration complementary with the configuration of said means for reinforcing said elongated member.

said plate longitudinal embossed area engaged to said means for reinforcing said elongated member to restrain lateral movement of said plate on said elongated member to stationarily position said plate on said elongated member, and

anchor means extending through said aligned openings into the rock formation and bearing against said plate recessed portion for urging said elongated member into compressive engagement with the rock formation to support the rock formation.

2. Apparatus for supporting a rock formation as set forth in claim 1 in which,

said means for reinforcing said elongated member includes a central rib embossed on said base portion opposite surface, and

said central rib extending the length of said channel member with a plurality of openings extending through said rib and spaced a preselected distance apart on said rib.

3. Apparatus for supporting a rock formation as set forth in claim 2 in which,

said openings in said central rib each have the configuration of a slot with a width equal to the width of said central rib and extending a preselected length along said central rib.

4. Apparatus for supporting a rock formation as set forth in claim 1 in which,

said opening in said means for reinforcing said elongated members is defined by opposite longitudinal side edges positioned in the plane of said opposite surface and opposite transverse abutment walls extending upwardly from said opposite surface.

- 5. Apparatus for supporting a rock formation as set forth in claim 4 in which.
 - said bearing plate recessed portion is positioned in said elongated member opening with said bearing plate bottom wall positioned oppositely of said abutment walls to restrain longitudinal movement of said bearing plate on said elongated member.
- Apparatus for supporting a rock formation as set . forth in claim 1 in which,
 - said bearing plate contact surface extends from said circular embossed area into overlying relation with said means for reinforcing said elongated member and said opposite surface of said elongated member base portion around said opening.
- 7. Apparatus for supporting a rock formation as set forth in claim 1 in which.
- said means for reinforcing said elongated member includes a rib extending longitudinally and positioned centrally on said base portion, and
- said rib including a pair of web sections connected at one end to each other and angularly disposed relative to one another and connected at an opposite end to said base portion.
- 8. Apparatus for supporting a rock formation as set forth in claim 7 in which,
 - said bearing plate longitudinal embossed area extends from diametrically opposed sides of said circular embossed area, and
 - said longitudinal embossed area has a configuration complementary with the configuration of said rib to overlie said rib to restrain said bearing plate from moving laterally on said elongated member.
- Apparatus for supporting a rock formation as set forth in claim 1 which includes.
 - means for restraining lateral movement of said bearing plate on said elongated member.
- 10. Apparatus for supporting a rock formation as set forth in claim 9 in which,
 - said means for restraining lateral movement of said bearing plate includes said elongated member having longitudinal edge portions with flanges extending angularly from said base portion, and
 - said bearing plate including longitudinal edge portions with flanges extending angularly from said outer surface into overlying abutting relation with said elongated member flanges.
 - 11. Apparatus as set forth in claim 10 in which,
 - said elongated member and said bearing plate have complementary transverse profiles positioned in overlying abutting relation to form a composite channel assembly.
 - 12. A bearing plate comprising,
 - a planar body portion having a longitudinal axis defining planar longitudinal edges and planar transverse edges,
 - a contact surface for engaging a generally planar surface on one side of said body portion and an outer surface on an opposite side of said body portion.
 - an embossed area extending outwardly from said body portion outer surface,
 - said embossed area including a circular embossment centered on said body portion and a longitudinal embossment extending outwardly from opposite sides of said circular embossment on said longitudinal axis.
 - said circular and longitudinal embossments centrally and longitudinally rigidify said body portion to resist deflection,
 - said circular embossment including a recessed portion having a bottom wall with a central opening therethrough, and
 - said longitudinal edges extending angularly from said body portion outer surface to form flanges for stiffening said longitudinal edges to resist bending.

- 13. A bearing plate as set forth in claim 12 in which, said longitudinal embossment has a V-shaped configuration extending from said circular embossment the length of said body portion on said longitudinal axis.
- 14. A bearing plate as set forth in claim 12 in which, said longitudinal embossment includes a reinforcing rib extending centrally on said body portion.
 - said reinforcing rib including a pair of web sections angularly disposed relative to one another, and
 - said web sections being connected at one end to each other and connected at an opposite end to said base portion.
- 15. A bearing plate as set forth in claim 12 which includes.
 - channel portions on said body portion outer surface between said circular and longitudinal embossments and said flanges on said longitudinal edges.
 - 16. A bearing plate as set forth in claim 12 in which, said flanges extend angularly from said outer surface at an angle to a height of about the height of said circular embossment from said outer surface, and
 - said flanges form with said circular and longitudinal embossment channel portions on said body portion outer surface.
- 17. A method for supporting a rock formation comprising the steps of,
 - positioning an elongated channel member in contact with a planar surface of a rock formation,
 - reinforcing the channel member with a longitudinal embossment extending the length of the channel member.
 - positioning openings in the channel member in spaced relation along the length of the embossment.
 - positioning a bearing plate having a contact surface in overlying abutting relation with the channel member around each opening therethrough,
 - positioning a recessed portion of the bearing plate within the opening of the channel member so that
 - an opening in the bearing plate is aligned with the opening in the channel member,
 - restraining longitudinal movement of the bearing plate on the channel member.
 - restraining lateral movement of the bearing plate on the channel member, and
 - extending an anchor bolt through the aligned openings in the bearing plate and the channel member into engagement with the rock formation to compress the bearing plate against the channel member to maintain the channel member in bearing contact with the surface of the rock formation.
 - 18. A method as set forth in claim 17 which includes, extending a longitudinal embossment of the bearing plate in overlying abutting relation with the longitudinal embossment of the channel member.
 - 19. A method as set forth in claim 17 which includes, extending longitudinal edges of the channel member angularly and downwardly from the surface of the rock formation, and
 - extending longitudinal edges of the bearing plate into overlying abutting relation with the channel member longitudinal edges.
 - 20. A method as set forth in claim 17 which includes, positioning the recessed portion of the bearing plate within an elongated slot of the channel member to restrain longitudinal movement of the bearing plate beyond the slot, and
 - extending the bearing plate contact surface into overlying abutting relation with the surface of the channel member around the slot to reinforce the channel member around the slot.

21. An apparatus for supporting a rock formation comprising:

an elongated member having a base portion with a length substantially greater than a width defining longitudinal edges forming a channel therebetween, said base portion having a bearing surface for contacting the rock formation and an opposite surface;

a central rib
defined on said base
portion opposite
surface extending the
length of said base
portion and positioned
centrally on said
opposite surface within
said channel, and at
least one opening
extending through said
rib;

a bearing
plate including a
contact surface and an
outer surface, said
contact surface
positioned in abutting
relation with said
elongated member
opposite surface, said

bearing plate defining a central opening aligned with said elongated member opening, said bearing plate including a central portion which defines the central opening and two spaced apart legs positioned on and secured to opposite sides of said central portion and two rib receiving openings defined by portions of _ said legs and sides positioned on opposite ends of said central portion, whereby respective portions of said central rib positioned on opposite sides of said elongated member opening are received within the rib receiving openings; and an anchor extending through said aligned openings into the rock formation and bearing against said bearing plate central portion for urging said bearing plate into compressive engagement with said elongated member to reinforce

said elongated member compressed against the rock formation to support the rock formation.

22. The apparatus for supporting a rock formation as claimed in claim 21, wherein said bearing plate central portion is attached to said legs through an embossed portion.

23. The apparatus for supporting a rock formation as claimed in claim 21, wherein said elongated member extends along a longitudinal axis and said central rib extends along the longitudinal axis, each of said legs of said bearing plate longitudinally extends from a first end to a second end, whereby said elongated member opening is positioned between said legs and said first end and said second end of each respective leq longitudinally extends beyond the elongated
member opening.

24. A method for supporting a rock formation, comprising the steps of:

positioning an elongated channel member in contact with a planar surface of a rock formation;

reinforcing the channel member with a longitudinal embossment extending the length of the channel member;

positioning an
opening in the channel
member;

positioning a
bearing plate having a
contact surface in
overlying relation with
the channel member
around the opening
therethrough;

straddling
portions of the
longitudinal embossment
by leg portions of the
bearing plate;

positioning a central portion of the bearing plate within the opening of the channel member so that

an opening in the bearing plate is aligned with the opening of the channel member;

restraining longitudinal movement of the bearing plate on the channel member; and extending an anchor bolt through the aligned openings in the bearing plate and the channel member into engagement with the rock formation to compress the bearing plate against the channel member to maintain the channel member in bearing contact with the surface of the rock formation.